

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re patent application of: ) Date: January 4, 2008  
Michael H. Gilbert ) Attorney Docket No.: F-120  
Serial No.: 09/728,152 ) Customer No.: 00919  
Filed: December 1, 2000 ) Group Art Unit: 3624  
Confirmation No.: 4441 ) Examiner: Stefanos Karmis  
Title: METHOD AND SYSTEM FOR VERTICAL MESSAGING, BILLING  
AND PAYMENT SERVICES

**APPELLANT'S BRIEF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This brief is in furtherance of the Notice of Appeal filed in this case on November 7, 2007.

The filing fee for a Brief in this application has been previously paid for the September 15, 2007 Brief.

The Commissioner is hereby authorized to charge any additional fees which may be required or credit any overpayment to Deposit Account No. **16-1885**.

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**I. Real Party in Interest**

The real party in interest in this appeal is Pitney Bowes Inc., a Delaware corporation, the assignee of this application.

**II. Related Appeals and Interferences**

There are no related Appeals and Interferences.

**III. Status of Claims**

- A) Claims 1 - 40 are in the application.
- B) Claims 19 – 40 have been cancelled
- C) Claims 1 - 18 are rejected.
- D) Claims 1 - 18 are on appeal

**IV. Status of Amendments**

No Amendment subsequent to the August 9, 2007, Final Rejection was entered.

**V. Summary of Claimed Subject Matter**

The claimed invention provides a method for acquiring raw usage data for a service from a meter (such as a meter measuring consumption of energy services) and providing all billing and payment processing services for various service providers across multiple tiers that cooperatively provide the service..

Claim 1 is the only independent claim in this application. Claim 1 relates to a method of generating and processing billing and payment information utilizing computing units connected to a network for a service provided cooperatively by multiple tiers Claim 1 includes the following steps:

collecting by a first computer unit usage information (200, 201) by a direct feed of raw data of the service from a meter by a customer from one of a first tier of the multiple tiers or a third party;

integrating by a second computer unit the usage information (500) with customer profile information (502) of the customer provided by a second tier of the multiple tiers;

generating by a third computer unit billing information (502) based on the usage information (500), the customer profile information (502), and rate information (503b) for the service; and

transmitting by a fourth computer unit a bill (504a, 504b) based on the billing information to the customer.

Appellant's invention is shown in line 6 of page 11 to line 9 of page 13. Claim 1 is also illustrated in Figs. 5A and 5B.

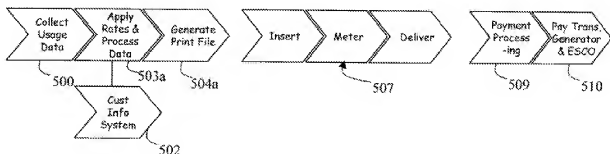


FIG. 5A

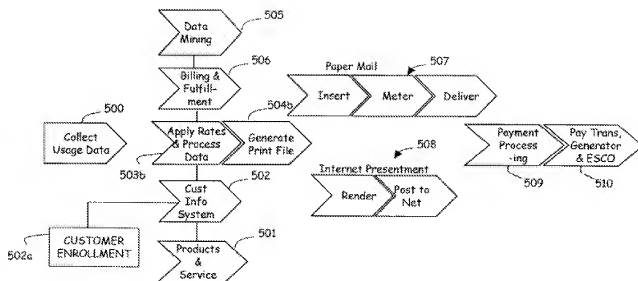


FIG. 5B

Figs. 5A and 5B show the process flows of two embodiments of the present invention. Fig. 5B illustrates the functions performed by one of the two embodiments of the present invention and compares the additional functionalities to the functionalities shown in Fig. 5A corresponding to the other of the embodiments discussed above with respect to Fig. 4. The embodiment shown in Fig. 5B shows that the utility company 200 or 201 (or a third party provider of such data) provides the usage or consumption data while all the remaining functionality is provided by the billing and payment services system 300 of the present invention (which may be provided, for example, by a separate provider of computerized information services (CIS)). Therefore, in step 500, the usage information is collected by either one of the energy service company 200, the transmission company 201, or a third party that collects such information (i.e. a meter reading entity), and provided to the billing and payment services system 300.

The billing and payment services system 300, according to this embodiment of the present invention, accesses the products and services related to the energy services in step 501 and the customer information (as discussed earlier herein) in step 502. As discussed earlier, the products and services and the customer records can be originated by one or more of the companies at one or more tiers that combine to provide the energy services. Examples

of such products and services include, for example, energy commodity marketing, hedging prices, service or preventive maintenance contracts on energy equipment such as lights, HVAC, and other services that are ancillary to providing energy services.

Therefore, the energy services companies, the transmission companies, as well as the generation companies may have each customer information and products and services information. This information is accessed or stored by the billing and payment services system 300 of the present information. Such access can be implemented in several ways. For example, each of the companies in the various tiers can provide data feeds, either in batch or online mode, so that the information can be stored by the billing and payment services system 300. Alternatively, some of the data may be stored by companies in the various tiers and this data may be accessed by the billing and payment services company 300 in either a batch or online mode. Furthermore, one of skill in the art would recognize that data required for constructing historical bills could be archived such that any required bills could be generated on-line if required. Such an on-demand generation of historical bills would prevent the need for storing large quantities of historical bills which may only be infrequently accessed.

Other functions that are provided by the billing and payment services system include data mining in step 505. The data mining functionality can be used both for cross-selling other items or services to the customers or for providing more efficient and better delivery of services to the customers. Some of the exemplary data mining functions that can be provided include forming associations based on the database of transactions. For example, one set of information in a transaction may imply the presence of another set of items. For example, consumption patterns may correlate to bill payment habits.

Another data mining function can include classification in which customers can be classified into categories based on some attributes of customer or transaction information. Another data mining functionality can include detecting sequential patterns in transactions so that these patterns can be used for predictive purposes.

All of these "mined" information or patterns can be used for a variety of purposes including cross-selling, better delivery of services and maximizing the efficiency of production or delivery resources. In addition, this information could be used for predictive purposes to improve marketing, hedging, and better using power futures transactions to decrease cost and risk.

Another feature of the present invention provides a customer enrollment process 502a that provides for customer related information to entered and transmitted to a customer information system 502 so that the customer information can be used to generate the billing information. According to the present invention, the customer enrollment function can be carried out any more than one of the multiple tiers that cooperate to provide the energy service to a customer. The customer information system 502 either stores or is configured to access the customer information from the customer enrollment process irrespective of which tier enrolls the customer.

In step 506, the billing and fulfillment functions include conventional accounting and book keeping processing (and their corresponding data processing steps) that tracks, for example, accounts receivables for each customer, and provides the information that can be used for tracking and allocating payments that are subsequently received from a customer.

#### **VI. Grounds of Rejection to be Reviewed on Appeal**

A. Whether or not claims 1-5 and 8-18 are patentable under 35 USC § 102(e) for being anticipated by Savage (U.S. Publication No. 2002/0026394A1), (Now U.S. Patent No. 7,236,950).

B. Whether or not claims 6 and 7 are patentable under 35 USC § 103(a) over Savage et al. (U.S. Publication No. 2002/002639A1 in view of Carlin (U.S. Patent No. 6,697,843B1).

#### **VII. Argument**

**A. Claims 1-5 and 8-18 have been rejected by the Examiner under 35 USC § 102(e) as being anticipated by Savage (U.S. Publication No. 2002/0026394A1), (Now U.S. Patent No. 7,236,950).**

Savage discloses the following in paragraph [0055].

"[0055] FIG. 2 is a simple schematic overview of key components for an application of an embodiment of the present invention, which provides further detail regarding the flow of information shown in FIG.1. Referring to FIG. 2, the "retail company" 234 is the entity which offers products and services to the retail market and is the client of the financial institution 100. In general, "supply chain vendors" 140 are the entities which provide the products and services that are offered for sale through retail company channels. Computer systems 114 of the financial institution 100 are

configured to perform billing functions, such as bill calculation, bill aggregation and statementing, and payment processing. The financial institution's customer service representative (CSR) 101 is the person, for example, at a terminal 103, communicating with the customer 110 and the financial institution's computer systems 114. Bill calculation by computer systems 114 of financial institution 100 involves receiving and validating energy usage data feed, for example, from a vendor 140, such as energy retailer 104 shown in FIG. 1, automatically calculating charges and taxes based on the energy pricing parameters of the energy retailer 104, and generating usage, accounting, and settlement reports to the energy retailer 104. Bill aggregation and statementing by computer systems 114 involves automatically combining, for example, the energy 104, telecommunications 102 and credit card 106 statements, using the financial institution's credit card system interchange network to speed bundle offers to market, calculating bundled discounts, rebates and rewards, and automatically rendering a combined statement, such as paper, fax, web-based or disk to the customer 110. Payment processing by the financial institution's computer systems 114 is the processing of payment received from the customer 110, for example, by check, autopay, or the Internet."

Savages computer system 114 of financial institution 100 receives and validates energy usage data feed from a vendor 140, such as energy retailer 104.

Savage discloses the following in paragraph [0088].

"[0088] FIG. 16 is a flow chart which provides further detail regarding the process of bill inquiry and adjustment regarding energy usage where the inquiry relates to incorrect usage for an embodiment of the present invention. Referring to FIG. 16, the customer 110 reviews the bill and sends an incorrect usage inquiry to the CSR 101 at S100. At S101, the CSR 101 receives and logs the disputed charge to the CAP system 142. The CAP system 142 receives and sends the disputed charge to the dispute tracking system 122 at S102. The dispute tracking system 122 receives the disputed charge and generates a dispute tracking number to the CSR 101 at S103. The CSR 101 receives the dispute tracking number and generates a meter re-read request to the wires and pipes database 194 at S104. The wires and pipes database 194 receives the request and sends a re-read message to a vendor technician at S105. The vendor technician receives the message, re-reads the meter and logs the re-read data to the wires and pipes database 194 at S106. The wires and pipes database 194 receives the data and generates a re-read data flat file to the energy bill calculator 146 at S107. At S108, the energy bill calculator 146 receives the flat file, logs to the dispute tracking system 122, makes a bill adjustment, and sends the bill adjustment to the retail company bill aggregator 124. The retail bill company aggregator 124 receives the bill adjustment and sends the bill adjustment to the CAP system 142 at S109.



The CAP system 142 receives the bill adjustment, logs the resolved disputed item, and sends the bill adjustment to the dispute tracking system 122 at S110. At S111, the dispute tracking system 122 receives the bill adjustment and closes out the disputed item."

If a dispute arises Savage's CSR receives a dispute tracking number and generates a meter re-read request to database 194, which sends a re-read message to a vendor technician. The technician re-reads the meter and logs the re-read data to database 194. Savage discloses the following in paragraph 0098.

[0098] "In an embodiment of the present invention, the bill calculation module 146 receives usage data, such as kWh for electricity or MMCF for gas, and other priced charges from the supply chain vendors 140. In addition to usage data and other related charges, other information is received from the vendor 140 and placed on the final bill to provide additional information about the usage, including, for example, meter number, last reading, current reading, start and end dates. The bill calculation module 146 converts the usage data into a rated bill, including any tax due on the sale. The retail company 234 also provides the financial institution 100 the required information to properly calculate the tax due on each sale. In the process for calculating the bill, initially, the incoming data is validated. Validating the data includes, receiving line items via a flat file from each supply chain vendor 140 or its meter reading vendor, validating the formatting of each line item, and returning any line items that do not match the mutually agreed upon format."

Savage's bill calculation module 146 receive, usage data such as kWh for electricity from the supply chain vendors 140.

Savage discloses the following in paragraph 0110.

"[0110] In an embodiment of the present invention, the statement generation system 164 takes the charges from the retail company aggregator 124 and the credit card 154 and the telephony 152 direct feeds, places them on a single bill, and applies any overall financial institution discounts. The system 164 renders and delivers a bill to the customer 110 in the customer's preferred format. The retail company charges are combined with credit card and telephony charges. In a combined bill for the customer 110 the retail company charges are combined with the customer's credit card charges and any direct telephony charges for the billing cycle. Any financial institution overall discounts are applied. Any overall financial institution discounts based on the retail company plus the financial institution plus telephony purchases by the individual customer are applied. A discount is given to the customer 110 for receiving a combined bill. Financial institution affinity points are calculated and applied. The applicable affinity points offered by the financial institution 100 or telephony for the customer based on the overall

retail company plus financial institution plus telephony purchases are calculated. The bill or statement is rendered in the format desired by the customer 110 and delivered to the customer 110 by paper invoice, electronic (Web based) invoice, or electronic (CD-ROM or floppy) invoice. FIGS. 24-29 show a sample of the combined statement generated for the customer 110 by the statement generation system 164 for an embodiment of the present invention. FIG. 30 depicts the annual expenditures by industry."

Savages generation system 164 takes the charges from the retail company aggregator 124 and the credit card 154 and the telephone 152 and places them on a single bill in the customer's preferred format.

Savage does not disclose or anticipate the following steps of claim 1 and those claims dependent, therein namely, collecting by a first computer unit usage information by a direct feed of raw data of the service from a meter by a customer from one of a first tier of the multiple tiers or a third party. Appellant received usage information by a direct feed of raw data of the service from a meter.

**B. Claims 6 and 7 have been rejected by the Examiner under 35 USC § 103(a) as being unpatentable over Savage et al. (U.S. Publication No. 2002/002639A1 in view of Carlin (U.S. Patent No. 6,697,843B1).**

**Claim 6**

Claim 6 is dependent on claim 5 which is dependent on claim 1. Claim 5 adds the following limitation to claim 1, wherein the fourth computer unit generates and transmits the bill to the customer in the form of a paper mailing, and claim 6 adds the following limitation to claim 5. wherein the step of transmitting the bill to the customer includes the steps of:

printing the bill at an optimal mailing location based on address information of the customer; and mailing the bill from the optimal mailing location.

Savage discloses the following in page 15 paragraph 0111.

"[0111] In an embodiment of the present invention, the payment processing system receives payments, posts payments to account, and processes. Payments are received, for example, by check, autopay, or the Internet. Payments are validated, and exceptions are processed. Payments are posted to accounts by applying payment amounts to accounts and decreasing the balance in accordance to the amount paid. Processing address changes includes receiving address changes and

applying address changes to the customer database 184. The receivable management system involves financing; account management, risk management, and collections. Financing includes, for example, identifying client charges, applying pricing rules, forwarding payment to clients, and performing audits, as well as funding."

Carlin discloses the following in Col. 3 lines 34-52.

"The mail production facility 1 includes printers, inserters, computers, etc., for converting the electronically transmitted variable and fixed data into the finished mail piece. The mail production facility 1 holds the incoming data for a limited time, advantageously seventy-two (72) hours, and then flushes the data. This above described process is the advantage that eliminates the need for a mail production facility 1 to store forms, which would then cause the inherent uncertainties of multiple copies of forms which must be updated.

The mail production facilities 1 could also be located on a worldwide basis, and hence use international conventions for determining and correcting addresses.

The print site is included at the mail production facility 1. A high speed printer and inserter is provided at the print site. If a printer at a mail production facility becomes unavailable, a feature of the system is that the printing can be distributed to a second mail production facility 1, such as an adjacent geographically related site."

Carlin discloses the following in col. 4, lines 37-65.

" FIGS. 2A and 2B illustrate the customer gateway in more detail. FIG. 2A is a shared customer gateway 9, with multiple mailers 15: whereas FIG. 2B is a dedicated gateway 9, with a single mailer 15. A mailer 15, or customer, has collected variable data, such as customer names, addresses, billing amount, etc. in local electronic files on a computer. The computer at the mailer connects to the gateway 9 via the connection 11. One appropriate connection 11 is TCP/IP over dial-up access. The mailer 15 transmits the variable data to the gateway 9.

The gateway preferably performs a data conversion on the variable data, in order to transform the variable data into a standardized format. Address hygiene is also preferably performed on the addresses in the variable data, according to the usual methods.

Reference is made to FIG. 7. At the gateway 9, the variable data 701 is sorted according to address, by geographic area. The geographic areas correspond to mail production sites. This can readily be performed in two steps. In the U.S., the variable data can be sorted by a 3-digit zip code into sorted data 703. The sorted variable data is then segmented into segmented data 705a, 705b. Segmented means that data for certain zip codes are grouped according to the geographically nearest mail production facilities. (It is possible to group geographically related mail by

other methods). Each geographic group of segmented, sorted variable data is transmitted via connection 13 (such as TCP/IP over a fully meshed frame relay network) to the corresponding mail production facility 1 discussed below.”

Carlin discloses a mail production facility. Carlin is not concerned with the location of the mail production facility. Carlin is sorting by zip codes to take advantage of the United States Post Office work sharing discounts.

In claim 6 Appellant prints printing the bill at an optimal mailing location based on address information of the customer; and mailing the bill from the optimal mailing location. By printing the bill at the optimal mailing location, Appellant reduces the time that it takes the post to delivery the bill. The Art cited by the Examiner does not disclose or anticipate the foregoing.

Notwithstanding the foregoing, in rejecting a claim under 35 U.S.C. §103, the Examiner is charged with the initial burden for providing a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *in re Lunsford*, 375 F.2d 385, 148 USPQ 721 (CCPA 1966); *in re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). The Examiner is also required to explain how and why one having ordinary skill in the art would have been led to modify an applied reference and/or combine applied references to arrive at the claimed invention. *In re Ochiai*, 37 USPQ2d 1127 (Fed. Cir. 1995); *in re Deuel*, 51 F.3d 1552, 34 USPQ 1210 (Fed. Cir. 1995); *in re Fritch*, 972 F.2d 1260, 23 USPQ 1780 (Fed. Cir. 1992); *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). In establishing the requisite motivation, it has been consistently held that both the suggestion and reasonable expectation of success must stem from the prior art itself, as a whole. *In re Ochiai*, supra; *in re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); *in re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *in re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988).

#### Claim 7

Claim 7 is dependent on claim 6 which depends on claim 5, which is dependent on claim 1. Claim 5 adds the following limitation to claim 1, wherein the fourth computer unit generates and transmits the bill to the customer in the form of a paper mailing, claim 6 adds the following limitation to claim 5. wherein the step of transmitting the bill to the customer includes the steps of: printing the bill at an optimal mailing location based on address

information of the customer; and mailing the bill from the optimal mailing location and claim 6 adds the following limitation to claim 6, wherein the optimal mailing location is determined based on at least one of a zip-code of the customer, a transportation cost, an environmental impact, or a mailing capacity of a mail distribution center.

In addition to the arguments made above in claim 7 Appellant optimal mailing location is determined based on at least one of a zip-code of the customer, a transportation cost, an environmental impact, or a mailing capacity of a mail distribution center. By printing the bill at the optimal mailing location, Appellant reduces the time that it takes the post to delivery the bill. The Art cited by the Examiner does not disclose or anticipate the foregoing.

### **PRAYER FOR RELIEF**

Appellants respectfully submit that appealed claims 1 - 18 in this application are patentable. It is requested that the Board of Appeal overrule the Examiner and direct allowance of the rejected claims.

Respectfully submitted,

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## **VIII. CLAIMS APPENDIX**

1. A method of generating and processing billing and payment information utilizing computing units connected to a network for a service provided cooperatively by multiple tiers, the method comprising the steps of:

collecting by a first computer unit usage information by a direct feed of raw data of the service from a meter by a customer from one of a first tier of the multiple tiers or a third party;

integrating by a second computer unit the usage information with customer profile information of the customer provided by a second tier of the multiple tiers;

generating by a third computer unit billing information based on the usage information, the customer profile information, and rate information for the service; and

transmitting by a fourth computer unit a bill, based on the billing information to the customer.

2. The method according to claim 1, wherein the first computer unit collects the usage information from the first tier that includes a distributor of the service that is different from a generator or a provider of the service.

3. The method according to claim 1, wherein the second computer unit integrates the usage information with customer profile information provided by one of a generator, a distributor, or a provider of the service.

4. The method according to claim 1, wherein the third computer unit generates billing information using rate information from one of a generator, a distributor, or a provider of the service.

5. The method according to claim 1, wherein the fourth computer unit generates and transmits the bill to the customer in the form of a paper mailing.

6. The method according to claim 5, wherein the step of transmitting the bill to the customer includes the steps of:

printing the bill at an optimal mailing location based on address information of the customer; and mailing the bill from the optimal mailing location.

7. The method according to claim 6, wherein the optimal mailing location is determined based on at least one of a zip-code of the customer, a transportation cost, an environmental impact, or a mailing capacity of a mail distribution center.

8. The method according to claim 1, further comprising the steps of:  
processing by a fifth computer unit payment information received from the customer;  
and

allocating by a sixth computer unit payments, based on the payment information, to pay service providers at the multiple tiers from the payment information received from the customer.

9. The method according to claim 8, wherein the step of allocating payments includes allocating payments to one or more of a generator, a distributor, or a provider of the service.

10. The method according to claim 1, wherein the service includes utility service.

11. The method according to claim 10, wherein the utility service includes one of power, water, gas, cable television, telephone, internet, or satellite television services.

12. The method according to claim 1, wherein the fourth computer unit transmits the billing information for electronic bill presentment to the customer using a public or private electronic network.

13. The method according to claim 12, wherein the public electronic network includes the Internet.

14. The method according to claim 1, wherein the step of transmitting the bill to the customer includes providing the billing information to a third party bill payment service.

15. The method according to claim 8, wherein the step of processing payment information includes using a third party authentication or verification service.

16. The method according to claim 1, further comprising the step of performing a seventh computer unit that is programmed to perform data mining using the usage information and the customer profile information.

17. The method according to claim 8, further comprising the step of performing data mining using the usage information, the customer profile information and the payment information.

18. The method according to claim 17, further comprising the step of using results of the data mining step to determine which additional services to offer to the customer.



**IX. EVIDENCE APPENDIX**

There is no additional evidence to submit.

**XI. RELATED PROCEEDING APPENDIX**

There are no related Appeals and Interferences.